DEC 1 5 2008

## 510K SUMMARY

Submitter of 510k: Emily B. Rossiter on behalf of John W. King, DDS

Contact Person:

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Date of Summary:

August 20, 2008

Trade Name: Distrax<sup>TM</sup>

Classification Name: External Mandibular Fixator and/or Distractor

Device Product Code: MQN

Predicate Device: Modus Modular Distraction Osteogenesis System (K051946)

Intended Use: The Distrax is intended for mandibular symphyseal widening and mandibular lengthening by distraction osteogenesis. Following the distraction osteogenesis, the Distrax may also be used for temporary stabilization during the consolidation phase. The Distrax is intended for single patient use only.

**Device Description:** 

Distrax<sup>TM</sup> is a preassembled distraction system consisting of the following major components: Distraction Screw, Distractor Arms, Fixed Screw, Threaded Tube, Locknut (optional). Titanium Bone Screws (K063298) and brackets (surgical stainless steel, 24 gauge) are required for use and should be obtained by the surgeon and orthodontist, respectively. An Activation Key is also supplied to turn the Distraction Screw. The patient contact materials of the Distrax are made of austenitic stainless steel type 304 (chromium-nickel stainless class) and type 316 (chromium-nickel class containing 2-3% molybdenum). These materials are specified in ISO standards 5832-1 and 5832-9 for medical implant applications. The device must be cleaned and sterilized before use.

Comparison with Predicate Device:

The Distrax Intraoral Distractor is substantially equivalent to the Modus Modular Distraction Osteogenesis System (K051946). Equivalence is based on similarities in intended use, materials of construction, design, and operating principles, as summarized in the following table. The major differences between the Distrax and the Modus are that the Distrax is intended for mandibular symphyseal widening and mandibular lengthening by distraction osteogenesis and is pre-assembled and customized to fit each patient. The

Modus is modular, requiring assembly and intraoperative fitting to the patient's bone structure; the Modus is intended for use in both mandibular and maxillary osteogenesis procedures, and fractures.

Feature	Distrax	Modus Modular Distraction Osteogenesis System - K051946
Intended Use	The Distrax is intended for mandibular	Subcutaneous distractor system
intended Ose	symphyseal widening and mandibular	intended for use in fractures,
	lengthening by distraction osteogenesis.	osteotomies, and arthrodeses; for
	Following the distraction osteogenesis,	use in the mandible and maxilla.
	the Distrax may also be used for	The Modus Modular Distractor
	temporary stabilization during the	is intended for mandibular
	consolidation phase.	symphyseal widening by
	consortation phase.	distraction osteogenesis.
Material	Stainless steel	Implant steel and titanium
Design	Preassembled and customized distractor	Plates, distraction cylinders,
Design	with four arms, fixed and distraction	flexible extensions offered in a
	screws, threaded tube, locknut (optional)	variety of sizes; allow
	and activation key to turn the distraction	adjustment of the vector by intra-
	screw.	operative bending if necessary.
Operational	The Distrax is a customized, preassem-	The Modus is used for various
Principles	bled, combination tooth and bone-borne	applications of the maxillofacial
· ·	appliance which is pre-fit to each patient,	bone structures. The cylinders,
	based upon mandibular impression and x-	which are available in uni-
	rays provided with the prescription. The	directional or bi-directional
	Distrax is attached to the mandibular	design, with multiple distraction
	symphysis by titanium bone screws and to	lengths, are used with the Modus
	the mandibular teeth with circumferential	plates and screws for gradual
	stainless steel wires. A hexagonal	bone distraction osteogenesis and
	distraction screw connects the fixed screw	for corrective osteotomies of the
	on one side of the appliance to the	mandible and maxilla.
	threaded tube on the other side. The	
	activation wrench is utilized, making	
	turns on the hexagonal distraction screw	
	until the desired bone lengthening is	
	achieved. The Distrax is then secured	
	with the locking screw and left in place	
	for stabilization and adequate bone	
	healing.	
Supplied Sterile?	No; instructions for sterilization provided	No
Single Use?	Yes	Not known





Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

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John W. King C/o Dr. Emily B. Rossiter President Regulatory Resources, Incorporated 800 East Leigh Street, Suite 206-5 Richmond, Virginia 23219

Re: K080542

Trade/Device Name: Distrax TM

Regulation Number: 21 CFR 872.4760

Regulation Name: Bone Plate

Regulatory Class: II Product Code: MQN

Dated: December 11, 2008 Received: December 12, 2008

## Dear Dr. King:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal</u> Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at 240-276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at 240-276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Chiu S. Lin, Ph. D

**Division Director** 

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices

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Office of Device Evaluation

Center for Devices and

Radiological Health

## **Indications for Use**

510(k) Number: K080542 Device Name: Distrax<sup>TM</sup> Indications for Use: The Distrax is intended for mandibular symphyseal widening and mandibular lengthening by distraction osteogenesis. Following the distraction osteogenesis, the Distrax may also be used for temporary stabilization during the consolidation phase. The Distrax is intended for single patient use only. Over-The-Counter Use Prescription Use AND/OR (21 CFR 801 Subpart C) (Part 21 CFR 801 Subpart D) (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED) Concurrence of CDRH, Office of Device Evaluation (ODE) (Division Sign-Off Division of Anesthesiology, General Hospital

Infection Control, Dental Devices

510(k) Number:

K080542